App. Ser. No. 10/601,306

Atty. Dkt. No.: 080437.52447US PATENT

REMARKS

Claims 1, 3, 7-10, 14-27, and 49-59 are currently pending in the present application, with claims 4-6, 11-13 and 28-48 standing withdrawn pursuant to election/restriction requirement.

In accordance with the Examiner's helpful suggestion, the Applicants have canceled claim 49 and corrected the dependencies of claims 50-51 and 53-58, as had been intended in the February 4, 2005 Amendment in which the limitations of claim 49 were incorporated into claim 1. Accordingly, claims 1, 3, 7-10, 14-27, and 50-59 remain in consideration.

The Applicants wish to express their appreciation for the Examiner's indication that claims 8, 10, 16-19, 21-27, 51-53 and 56-58 contain patentable subject matter. The Applicants have placed these claims into allowable form.

Pending Rejections Under § 103(a): New rejections have been entered under 35 U.S.C. § 103(a). Claims 1, 3, 7, 9, 14-15, 20, 50, 54-55 and 59 stand rejected as unpatentable over German patent document no. DE 3622663 A1 ("DE '663") in view of U.S. Patent No. 6,398,287 B1 to Smith, et al. ("Smith"). The Applicants respectfully traverse the pending rejections on the grounds that these references, either alone or in combination, fail to teach or suggest all the features of the present invention recited in independent claims 1 and 59.

The Applicants have amended independent claims 1 and 59 to recite that the mechanically moveable adjusting element provided beneath or on an edge of the outer skin, enables the outer skin to be deformed "by moving in a direction which increases tension in the outer skin." Amended claim 1 (amended claim 59)

App. Ser. No. 10/601,306 Atty. Dkt. No.: 080437.52447US

PATENT

similar). In the recited claims, it is the moveable element which is used to deform the outer skin, not the outer skin which moves the movable element.

In contrast, the DE '663 document discloses a "moveable" element which is, in fact, effectively "fixed," in that it simply pivots about a hinge as air flow over the skin pushes by the skin onto the element. DE '663 Abstract ("The flexible guide surfaces automatically assume a particularly streamlined shape under the action of the slipstream."); see also DE '663 Figs. 3-7, 10 (hinged panel reacts to air flow, as shown in particular in Fig. 4). Accordingly, rather than the present invention's use of a movable adjusting element to cause a change in the outer skin shape (i.e., applying a force to the skin which increases the tension in the skin, as when raising a bar to form a spoiler, as in present Figs. 4 or 5), DE '663 teaches an element which decreases skin tension when it moves.

DE '663 teaches that when an air stream is moving over a flexible skin, the air deforms the skin over the underlying movable element. If the movable element were not allowed to move, then for a given slipstream flow the skin would experience a corresponding level of tension as it was pressed against the underlying fixed element (a tension corresponding to the force the slipstream is causing the skin to apply to the fixed element). If the DE '663 moveable element is instead allowed to move to seek an equilibrium position (as DE '663 teaches), then the force on the element is no longer unbalanced across its pivot point (i.e., the element is in its lowest energy state for the given slipstream flow), and therefore the force applied by the outer skin to the element (and the corresponding level of tension in the skin) is lower than when the element was

App. Ser. No. 10/601,306

Atty. Dkt. No.: 080437.52447US

PATENT

fixed in an unbalanced position. Therefore, the DE '663 reference teaches relieving the tension in the outer skin as the element moves. The DE '663 reference therefore fails to teach or suggest claim 1's (or claim 59's) movable element deforms an outer skin "by moving in a direction which increases tension in the outer skin."

Because the DE '663 reference fails to teach or suggest the foregoing feature of the claim 1 and claim 59 embodiments of the present invention, and further because the Smith reference, cited for teaching a coating, fails to suggest anything regarding this feature, these references, either alone or in combination, cannot render amended claims 1, 3, 7, 9, 14-15, 20, 50, 54-55 and 59 unpatentable under § 103(a). Reconsideration and withdrawal of the § 103(a) rejection of these claims is respectfully requested.

CONCLUSION

The Applicants respectfully submit that claims 1, 3, 7-10, 14-27 and 50-59 are in condition for allowance. Early and favorable consideration, and issuance of a Notice of Allowance for these claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit

App. Ser. No. 10/601,306 Atty. Dkt. No.: 080437.52447US PATENT

Account No. 05-1323 (Docket #080437.52447US).

Respectfully submitted,

August 3, 2005

Jeffrey D. Sanok

Registration No. 32,169

Mark H. Neblett

Registration No. 42,028

CROWELL & MORING, LLP

P.O. Box 14300

Washington, DC 20044-4300 Telephone No.: (202) 624-2500 Facsimile No.: (202) 628-8844